

26. (Once Amended) A stencil printing emulsion ink comprising:  
an oil phase component,  
a water phase component, and  
an alkyl-modified carboxyvinyl polymer and/or carboxyvinyl polymer, wherein said ink is free from an emulsifier which forms a liquid crystal structure between the oil phase and the water phase.

#### REMARKS

The Office Action of March 20, 2003 has been received and carefully reviewed. Reconsideration and withdrawal of the currently pending rejections are requested for the reasons advanced in detail below.

Prior to the instant amendment, claims 6-8, 11-15, 18-22, and 25-30 were pending in the application. Claims 6, 11, 18, 25 and 26 are herein amended. Accordingly, claims 6-8, 11-15, 18-22, and 25-30 remain pending in the instant application.

Claims 6-8, 11-15, 18-22, and 25-30 stand rejected under 35 U.S.C. 112, first paragraph, on the basis that the phrases "essentially devoid of a non-ionic surfactant" and "substantially devoid of a non-ionic surfactant", as set forth in claims 6, 18, 25-26, and claim 11, respectively, fail to satisfy the written description requirement since there allegedly does not appear to be sufficient support for either phrase in the application, as originally filed.

As presently amended, claims 6, 11, 18, 25 and 26 recite, *inter alia*, a stencil printing emulsion ink that is free from an emulsifier which forms a liquid crystal structure between the oil phase and the water phase. Support for these claim amendments can be found at least on page 1, lines 5-9 of the specification. It is respectfully submitted that amended claims 6, 11, 18, 25, and 26 comply with the written description requirements under 35 U.S.C. 112, first paragraph. Accordingly, reconsideration and withdraw of the rejection of claims 6, 11, 18, 25, and 26 under 35 U.S.C. 112, first paragraph, is requested.

Claims 6-8, 11-15, 18-22 and 25-30 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,165,258 to Asada (hereinafter "Asada"). As earlier noted, claims 6, 11, 18, 25 and 26 have been amended to recite, *inter alia*, a stencil printing emulsion ink that is

free from an emulsifier which forms a liquid crystal structure between the oil phase and the water phase. As explained in the application, most emulsion inks employ conventional emulsifying agents, e.g., non-ionic surfactants such as polyglycerol fatty-esters, which enables formation of a liquid structure between the oil phase and the water phase, which results in improved storage stability. The liquid crystal structure formed from such non-ionic surfactants, however, has a tendency to reduce the rate of penetration of ink into printed paper since the water contained therein is less apt to be evaporated due to the liquid crystal structure. This causes offset, i.e., the ink on the surface of a piece of printed paper transfers to the back of another piece of the printed paper, and/or blocking, i.e., a plurality of pieces of printed paper behind to each other by ink on their surfaces.

Asada, however, does not disclose a stencil printing water-in-oil emulsion ink that is free from an emulsifier which forms a liquid crystal structure between the oil phase and the water phase, as set forth in amended claims 6, 11, 18, 25 and 26. Rather, Asada requires the use of as nonionic surfactants, e.g. fatty esters of polyglycerin (See Asada Col. 3, lines 40-50), as emulsifiers, which form a liquid crystal structure between the water phase and the oil phase, which reduce the penetration of the ink into paper. Asada, therefore, fails to disclose each and every element of claims 6, 11, 18, 25, and 26. Accordingly, it is respectfully submitted that the rejection of claims 6, 11, 18, 25, and 26 under 35 U.S.C. 102(e) should be reconsidered and withdrawn. Inasmuch as claims 7-8, 12-15, 19-22, and 27-30 are dependent on amended claims 6, 11, 18, 25 and 26, the rejection of these claims under 35 U.S.C. 102(e) should also be withdrawn.

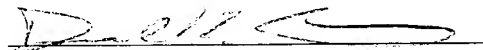
Claims 6-8 and 13-20 also stand rejected under 35 U.S.C. 103(a) as being unpatentable over Asada. As discussed above with respect to the rejection of claims 6-8 and 13-20 under 102(e), Asada does not disclose a stencil printing emulsion that is free from an emulsifier which forms a liquid crystal structure between the oil phase and the water phase, as set forth in amended independent claims 6, 11 and 18. Accordingly, Asada fails to disclose each and every element of amended claims 6, 11, and 18, as required for a *prima facie* case of obviousness under 35 U.S.C. 103(a). Accordingly, it is respectfully submitted that the rejection of claims 6-8 and 13-20 under 35 U.S.C. 103(a) should also be reconsidered and withdrawn. Inasmuch as claims 7-8, 14-17, and 19-20 are dependent on claims 6, 11, and 18, the rejection of these claims under 35 U.S.C. 103(a)

should also be withdrawn.

Claims 6-8 also stand rejected under 35 U.S.C. 103(a) as being unpatenable over JP 06049401 in view of Asada. It is respectfully submitted, however, that JP 06049401 does not cure the above-noted deficiencies of Asada. Like Asada, JP06049401 also employs higher fatty acid esters, e.g. sorbitan higher fatty acid ester, as surfactants, which forms liquid crystal structure between the oil phase and the water phase which reduces the penetration of ink into paper. The combination of Asada and JP06049401 fail to disclose a stencil printing water-in-oil emulsion ink that is free from an emulsifier which forms a liquid crystal structure between the oil phase and the water phase. Accordingly, since Asada and JP06049401 fail to teach or suggest each and every element of amended claims 6, the rejection of claim 6 should also be reconsidered and withdrawn. Inasmuch as claims 7-8 are dependent on amended claim 6, the rejection of these claims under 35 U.S.C. 103(a) over JP 06049401 in view of Asada should also be withdrawn.

Having responded to each objection and rejection set forth in the Final Office Action, early and favorable Notice of Allowance is respectfully solicited. In the event that the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of one or more of the above claims, the Examiner is courteously requested to contact Applicants' undersigned representative.

Respectfully submitted,



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**MARKED UP VERSION OF THE CLAIMS**

**In the Claims:**

Please amend claims 6, 11, 18, 25, and 26 as follows:

6. (Twice Amended) A stencil printing emulsion ink comprising:

An oil phase component,

A water phase component,

An alkyl-modified carboxyvinyl polymer and/or carboxyvinyl polymer in which the content of the alkyl-modified carboxyvinyl polymer and/or carboxyvinyl polymer is 0.2 to 0.4% by weight of the total weight of the ink, and

borax, [wherein said ink is essentially devoid of a non-ionic surfactant] wherein said ink is free from an emulsifier which forms a liquid crystal structure between the oil phase and the water phase.

11. (Twice Amended) A stencil printing emulsion ink comprising:

an oil phase component,

a water phase component,

an alkyl-modified carboxyvinyl polymer in which the content of the alkyl-modified carboxyvinyl polymer is 0.01 to 1% by weight of the total weight of the ink, and

borax, [wherein said ink is substantially devoid of a non-ionic surfactant] wherein said ink is free from an emulsifier which forms a liquid crystal structure between the oil phase and the water phase.

18. (Twice Amended) A stencil printing emulsion ink comprising;

an oil phase component,

a water phase component,

an alkyl-modified carboxyvinyl polymer and carboxyvinyl polymer in which the content of the alkyl-modified carboxyvinyl polymer and the carboxyvinyl polymer is 0.01 to 1% by weight of the total weight of the ink, and

borax, [wherein said ink is essentially devoid of a non-ionic surfactant] wherein said ink is free from an emulsifier which forms a liquid crystal structure between the oil phase and the water phase.

25. (Twice Amended) A stencil printing emulsion ink comprising:

an oil phase component,

a water phase component,

an alkyl-modified carboxyvinyl polymer and carboxyvinyl polymer in which the content of the alkyl-modified carboxyvinyl polymer and the carboxyvinyl polymer is 0.01 to 1% by weight of the total weight of the ink, and

borax in which the content of the borax is 0.001 to 2% by weight of the total weight of the ink, wherein the ink is in the form of a W/O emulsion in which the content of the oil phase is 20 to 40% of the total weight of the ink and the content of the water phase is 60 to 80% of by weight of the total weight of the ink, and [wherein said ink is essentially devoid of a non-ionic surfactant] wherein said ink is free from an emulsifier which forms a liquid crystal structure between the oil phase and the water phase.

26. (Once Amended) A stencil printing emulsion ink comprising:

an oil phase component,

a water phase component, and

an alkyl-modified carboxyvinyl polymer and/or carboxyvinyl polymer, [wherein said ink is essentially devoid of a non-ionic surfactant] wherein said ink is free from an emulsifier which forms a liquid crystal structure between the oil phase and the water phase.